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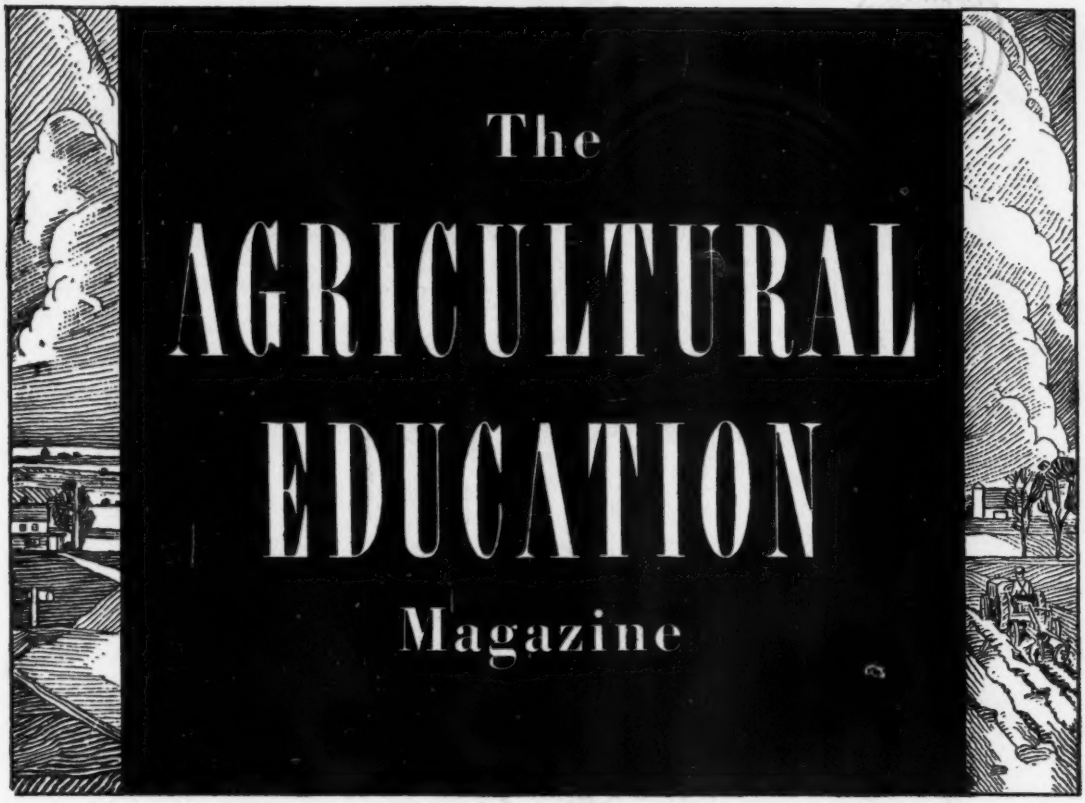

The AGRICULTURAL EDUCATION Magazine

V—anquish the Japs
I—nsure our freedom
C—ombine our efforts
T—hink nothing of sacrifice
O—rganize a reserve
R—emember Pearl Harbor
Y—oung America, let's go forward

VOCATIONAL AGRICULTURE
For TEACHERS Teacher-Educators And Supervisors
OFFICIAL PUBLICATION

The Agricultural Education Magazine

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Editorial Comment

Vocational Education Loses a Leader

CARL A. BELL, Director of Vocational Education for the State of Illinois, passed away in Lincoln, Illinois, on Thursday, February 12, 1942. His outstanding career in vocational education was brought to an untimely close as the result of an automobile accident. .

C. A. Bell

Mr. Bell had been a successful teacher of vocational agriculture at Carey, Ohio, and at Fisher and Pontiac in Illinois, before joining the staff of the Board for Vocational Education in 1935 as a supervisor of vocational agriculture. In 1937 he was appointed Director of Vocational Education. At the time of his death he was President of the National Association of Directors of Vocational Education.

Under Mr. Bell's aggressive and skillful leadership, vocational education in the Illinois Public Schools has developed along consistently sound lines, based on a realistic philosophy which was one of his notable personal characteristics. The period during which he directed the various activities of his department shows a marked growth in all fields of vocational education, including Agriculture, Distributive Education, Homemaking, and Trade and Industry.

In the passing of Carl Bell, Illinois and all vocational education has lost a leader of rare ability. His pleasant personality was combined with an admirable firmness of convictions and consistent fairness in dealing with others. His unnumbered friends, his loyal co-workers, and all with whom he has been associated in professional relationships will miss him immeasurably thru the years.

Subscription Time Approaches

The rating of the states in subscriptions to our magazine follows, as reported by the business manager at the A. V. A. convention in Boston.

A state is rated 100 percent when the number of paid subscriptions is equal to 110 percent of the number of all-day white teachers employed.

Rank	State	Percent	Rank	State	Percent
1	VERMONT	171	25	Maine	92
2	VIRGINIA	155	26	Mississippi	89
3	IDAHO	140	27	South Dakota	89
4	FLORIDA	134	28	Kansas	86
5	NEVADA	133	29	Oklahoma	84
6	NORTH DAKOTA	125	30	Indiana	81
7	GEORGIA	122	31	Illinois	79
8	NEW YORK	119	32	Connecticut	68
9	WISCONSIN	119	33	Texas	68
10	WYOMING	117	34	Washington	66
11	NEW MEXICO	115	35	Pennsylvania	65
12	OREGON	110	36	Delaware	58
13	NEW JERSEY	108	37	New Hampshire	57
14	ALABAMA	107	38	Arkansas	55
15	MASSACHUSETTS	106	39	Maryland	55
16	NEBRASKA	105	40	Colorado	53
17	OHIO	105	41	South Carolina	48
18	WEST VIRGINIA	105	42	Arizona	46
19	MISSOURI	100	43	Montana	45
20	UTAH	100	44	Minnesota	43
21	Iowa	96	45	California	40
22	Michigan	96	46	Louisiana	37
23	Tennessee	95	47	North Carolina	30
24	Kentucky	93	48	Rhode Island	14

During the annual conferences in the summer months is the ideal time for the teachers of the state, members of the executive committee of agricultural teachers, supervisors, and teacher-trainers to unite in a drive to secure subscriptions. The easiest way is to assess all teachers at the annual conference when the annual dues are collected. In particular, this request is directed to the presidents of the teachers' associations and to the supervisors in the states affected, and urges that you come to the support of the magazine this year generously and thus assure for your state a rating in the 100 percent class. For this, my sincere thanks.

W. F. S.

The Challenge to Agricultural Education

AGRICULTURAL education is being put to the test in this hour of crisis. Those institutions and agencies that have no contribution to make to our social and economic betterment have no right to exist. Society has no obligation to encourage and support those activities, agencies, and institutions which make little or no contribution to our social goals.

Agricultural education, like all education, must continually rediscover its place and function in society and adjust its program of activities to make significant contributions to those national goals. We must continue to ask ourselves the question, "What should vocational education in agriculture contribute to the solution of problems faced by our people? What programs of activities will contribute to the solution of these pressing problems?"

The one great problem facing the nation today is that of winning the war. Farm people have an important part to play in this undertaking. Agricultural education's part is that of helping the farmer to make his contribution in an intelligent and efficient manner. Its program of activities must be directed toward this goal. There are in our judgment four specific things that this type of education should do.

FIRST, it must stimulate the farm people to recognize the seriousness of the situation and to discover the place of the farm in the national plan and program for victory. This is no easy task. Farmers have been told for more than twelve years that the low prices and low farm income are largely the results of overproduction and oversupply of agricultural commodities. They have been told that we have great surpluses of all important agricultural commodities, that our bins are bursting with millions of bushels of grain, our storehouse of cotton, full and running over, hogs, beef, and dairy products stored in great quantities. Only a few months ago an important agricultural leader told the American farmers that we have accumulated such a tremendous surplus of agricultural commodities in our Ever Normal Granary that we can feed our people and take care of America's needs for a long war. The American farmer has been taught for years that there would be no need for agricultural expansion during a war crisis. He has come to believe what he has been taught.

Now war has come and we are beginning to tell these same farmers that there is an urgent need for tremendous increases in agricultural commodities, especially in peanuts, soy beans, vegetables, beef, poultry and poultry products, pork and dairy products.

Agricultural education must help the American farmer to understand this sudden change in need as it relates to agricultural products. He must understand that instead of thinking in terms of feeding 130,000,000 Americans, we must plan to feed millions of starving, hungry, fighting British, Russians, and Chinese. The fighting forces of our Allies as well as many million civilians must be fed if they are to remain our Allies and help to fight our common battles.

WE MAY rest assured that the Amercian farmer will be anxious to do whatever he can in this crisis when he understands the situation. He will produce when he recognizes the *need* for producing. Agricultural education must accept as its responsibility helping the farmer to understand these needs.

The second major problem facing agricultural education is that of helping farm families to discover the place of their farms in this program for victory. The farmer must make intelligent choices about the many problems involved in planning his farm program for the rest of 1942 and for the duration. He must plan wisely for each acre of land and each head of livestock. We must teach him to plan in terms of social and military needs instead of on the basis of economic data and personal needs.

When the farmer has discovered his place in this program for victory and has seen the part his farm can contribute, agricultural education must then help him to formulate specific plans of action to get the job done. It may be planning a new enterprise, enlarging an old enterprise or it may be making those already on the farm more efficient. In every part of the

(Continued on page 218)

A. K. GETMAN **Professional** R. W. GREGORY

How Teachers of Vocational Agriculture Can Contribute to War and Post-War Planning*

OSCAR R. LeBEAU, Associate Agricultural Economist, Bureau of Agricultural Economics

O. R. LeBeau

"WHAT can we do to help?" This was the patriotic inquiry voiced by the Agricultural Section of the American Vocational Association at its annual convention in Boston, in discussing the topic "Agricultural Planning for Defense." Agricultural teachers, now 9,000 strong, constitute one of the largest and best equipped corps of professional workers in rural America. Their potential contribution to the national war effort deserves special consideration.

In thousands of local communities these teachers already are putting their shoulders to the wheel assisting in the Food-for-Freedom program, the farm machinery repair drive, the training of skilled workers for agriculture, and other activities. Many are also co-operating in agricultural planning work in their localities, helping farm people and public agencies plan together for war and post-war adjustments. The significance of their work in all these fields will become increasingly apparent in the months immediately ahead, and notably so in the case of agricultural planning.

What is Co-operative Agricultural Planning?

Co-operative agricultural planning, formerly called land use planning, was started in 1938 as a part of a broad national effort to develop a well-rounded program of conservation, adjustment, and rehabilitation for American agriculture. It is administered by the United States Department of Agriculture and the State Agricultural Colleges, with the assistance of State, county, and community agricultural planning committees. These State and local committees usually are composed of representative farm men, women, and older youth, and of the local officials of State and Federal agencies concerned with land use and rural welfare.

The major objectives of this planning work are: (1) to achieve better co-ordination of the several agricultural action programs as they are administered in the locality; (2) to clarify and improve the working relationships between Federal, State, and local agencies; (3) to find more effective and economical ways of adapting public agricultural programs to local conditions; and (4) to facilitate the attacking of agricultural problems on all fronts at the same time.

Extent of Present Participation

Since one of the major functions of the co-operative agricultural planning process is co-ordination of the activities of all agencies interested in helping the farmer, careful consideration should be given as to how the public schools can participate most effectively. That progress already has been made is evidenced by the fact that representatives of the State departments of education are serving on State agricultural planning committees in at least 24 States. Similarly, a considerable number of county and community planning committees have one or more public school representatives as regular members. Altogether, public school representatives were reported on 1,132, or 63 percent, of the county planning committees last year. These representatives are usually vocational teachers and county superintendents of schools.

How Participation Benefits Vocational Education

Participation in the co-operative agricultural planning process has numerous values for teachers of vocational agriculture and for administrators. It helps to vitalize local vocational education programs by suggesting teaching materials that are practical and up-to-the-minute, by providing a stimulus for an enlarged evening school program, by spotlighting community problems that need emphasis, and by aiding vocational teachers to keep in touch with Federal, State, and local agencies that are dealing with rural problems.

Participation in the program will improve public interest in vocational education by (1) keeping the vocational education program geared closely to local farm and community interests and problems; (2) giving vocational teachers a closer connection with the programs of the various action agencies; (3) focusing public attention on the need for more adequate educational training for rural youth; and (4) facilitating public acceptance of vocational education as an essential aspect of community organization for rural welfare.

How Vocational Teachers Can Contribute to Effective Planning

Experience shows that vocational teachers can promote and implement co-operative agricultural planning in at least three major ways. These are outlined below:

A. *By disseminating useful agricultural information.* Thru systematic instruction of all-day, part-time and evening classes, vocational teachers have an excellent opportunity to assist farm people of all ages.

1. *All-day classes for high school students.* Thru this type of instruction local vocational teachers can contribute by:
   a. Developing in local farm youth the basic knowledge and understanding of the agricultural sciences essential to wise planning.
   b. Teaching and discussing principles and procedures involved in co-operative agricultural planning.
   c. Emphasizing the development of those particular skills that are needed in achieving the agricultural adjustments recommended by planning committees.
   d. Incorporating the recommendations of planning committees in their teaching.
   e. Encouraging attendance of students at general community meetings sponsored by local planning committees.

Part-time classes for out-of-school youth. Vocational teachers have numerous opportunities to promote co-operative agricultural planning. Typical of these activities are the following:
   a. Acquainting farm youth with the agricultural policies, principles, and procedures considered by community and county committees.
   b. Urging the attendance of rural youth at general community meetings for agricultural planning purposes.
   c. Encouraging the adoption of recommended land use and conservation practices on the home farms of the youth.
   d. Assisting rural young people to obtain the guidance, training, and placement facilities recommended by planning committees.

3. *Evening schools for adult farmers.* Thru this type of instruction, vocational teachers can help farm people to obtain a better understanding of rural problems and more effective participation in co-operative agricultural planning. Included are such activities as the following:
   a. Stressing the necessity for co-operative agricultural planning and explaining the principles underlying it.
   b. Basing teaching and discussion

materials on current agricultural problems such as tenure, production, and credit.

c. Assisting farmers in planning needed land use adjustments on their home farms.

d. Urging the attendance of local farmers and homemakers at general community meetings sponsored by local agricultural planning committees.

B. *By assembling and interpreting basic information.* Vocational teachers are especially fitted by training and experience to assist local planning committees to assemble and interpret the basic information needed for intelligent planning. This includes assistance in such activities as the following:

1. Analyzing the supervised farm practice records of vocational students to ascertain the farm practices best adapted to the community.
2. Excerpting and simplifying experiment station findings for local consumption.
3. Helping to survey the present and prospective school needs and facilities in the respective land use areas.
4. Aiding in the determination of the number and distribution of vocational graduates, older youth, and potential farmers that need farms or other opportunity for employment.
5. Studying the farming opportunities available in the community.
6. Helping to ascertain the employment opportunities for surplus farm youth in the rural services, trades, and other local enterprises.
7. Aiding in the assembly of information concerning farm practices, crop acreage, and other land use factors pertaining to the farms in the locality.
8. Assisting committeemen and technical advisers in making local surveys of particular agricultural problems.
9. Helping in the preparation of charts, maps, and educational exhibits to facilitate agricultural planning.
10. Assisting local planning groups to relate their local findings to the general problems of the county, state, and nation.

C. *By assisting farmers in making needed agricultural adjustments.* Working closely with representatives of other public agencies, vocational teachers are in position thru their laboratory, farm shop, supervised farm practice, Future Farmers of America organization, and other community activities, to implement many of the agricultural adjustments recommended. Typical of these services are the following:

1. Helping to draft the educational recommendations that are to be included in the local planning committee's co-ordinated agricultural program.
2. Orienting the community activities of Future Farmers of America to achieve some of the goals of community planning committees.
3. Assisting in the development of special community improvement programs such as rodent control and weed eradication.
4. Encouraging and participating in reforestation, farm woodlot improvement, and other forestry projects recommended by committees.
5. Testing soils for lime requirement in school laboratories.
6. Helping students and farmers to organize purebred sire associations and to locate suitable animals.
7. Assisting in running contour lines and in building terraces to prevent soil erosion.
8. Utilizing the school shop as a center for local farm machinery repair work.
9. Training demonstration teams to appear before farmers and civic groups to emphasize the value of recommended farm practices.
10. Presenting educational exhibits at community fairs and other gatherings to support land use recommendations.
11. Writing news stories for local papers on the land use adjustments being made by students.
12. Explaining planning work at meetings of farm organizations, civic groups and educational meetings, and serving as discussion leaders at community-planning committee meetings.
13. Aiding in the development of co-ordinated plans for individual farms.

Suggested Steps for Relating Vocational Education and Planning

Effective participation of state and local agricultural leaders in the co-operative agricultural planning process involves certain minimum essentials in organizational procedure and co-operation on the State, county, and community levels.

A. *State level:*

1. Attendance of the State Director of Vocational Education, or his representative, at the meetings of the State Agricultural Planning Committees.
2. Collaboration of the State Agricultural Planning Committee with representatives of the State Department of Education on matters relating to vocational education and the public schools. This includes consultation with the State Director of Vocational Education regarding the educational services desired from vocational teachers in the development and implementation of co-ordinated county agricultural programs.

B. *County level:*

1. Membership of at least one representative of the public schools on each county planning committee. This might include the county superintendent of schools or a representative vocational teacher. (In some cases, the State Director of Vocational Education nominates the vocational teachers who are to serve on the respective county committees; in others, local vocational teachers choose their own representatives. Counties having only two or three vocational teachers sometimes permit all of them to attend the county planning committee meetings as observers. These teachers in turn carry important information back to their respective communities.)
2. Co-operation of public school representatives with other professional workers in providing the educational services essential to implementing the recommendations of the local agricultural planning committees. A large number of committees have organized professional agricultural workers councils. Included in these organizations are the vocational teachers, extension workers, FSA supervisors, AAA employees, SCS technicians, and the other professional workers operating in the county.
3. Collaboration on the part of all agricultural agencies operating in the county concerning the major objectives and goals to be achieved by rural people.

C. *Community level:*

1. Membership of the local agricultural teachers or other school representatives on the community agricultural planning committees. (In a number of counties, a vocational teacher serves as secretary of the community committees.)
2. Optimum utilization of the local school plant as a community center for planning groups.
3. Emphasis on as many of the items listed above as feasible, thru the teachers' regular all-day, part-time, and evening-school activities.

Illustrations of how state supervisors and agricultural teacher-trainers are participating in the co-operative planning program of their states are listed in the joint statement mentioned above. These will not be discussed in this article since copies of the complete statement have been sent to the persons most vitally concerned.

Teachers interested in seeing agricultural planning started or extended to their communities, are urged to confer with their state supervisors for any additional information that may be needed.

* Adapted from a joint statement by the Agricultural Education Service, the Federal Extension Service and the Bureau of Agricultural Economics entitled "Co-operative Agricultural Planning and Vocational Education," which was distributed recently to State leaders of vocational education and co-operative agricultural planning. Single copies of the complete statement may be obtained from the Agricultural Service, Washington, D. C.

Book Review

Sheep, by Horlacher & Hammons, pp. 348, illustrated, published by Interstate, list price $2.00. A practical book to be used in solving problems in sheep production. Typical problems are listed at the beginning of each chapter, following which is content material that may be used in solving the problems. Suggestions for checking farm practices followed on the home farm, these to be compared with practices discussed in the chapter with the purpose in mind of making definite improvements where necessary, should prove helpful to all persons interested in sheep production. Quick and easy reference is made possible by listing in the table of contents all important chapter divisions, and by a simple but complete index with cross reference. Vocational agricultural teachers and students should find this book most helpful.

APD

The best way to strengthen one's judgment is to exercise it.

A. M. FIELD

Methods

How Well Can We Estimate?

W. F. STEWART, Teacher Education, Ohio State University

W. F. Stewart

THE room in which they were sitting was 32 feet long. One of my students estimated it as 42 feet; another as 20 feet. Two dots on the blackboard were 46 inches apart. One student estimated the distance as 32 inches; another as 52 inches. They looked at a quantity of water in a milk can. One estimated it as seven quarts; another, 1¾ quarts; it measured 2½ quarts. The class called to mind the familiar campus "oval," an area in the center of the campus surrounded by a drive—very familiar to all of the students. One estimated the area as 30 acres; another, six. The Service Department tells me it is 18½ acres.

Do not these estimates of familiar values, submitted by my class of 42 students, rather convincingly illustrate that we have not developed the ability to estimate reasonably closely many of the common life values with which we have to deal—such values as dimensions, large and small areas, radial and horizontal distances, weights, large and small, and volumes?

The readers of this magazine may recall that I raised the question of a contest in estimating in a brief article which appeared in the issue of January, 1936, because I had been impressed with the frequent need which all of us have to make estimates in the areas mentioned. Since the mental process is a form of judgment, it seems only logical that improvement in the ability can come thru practice; hence, the possibilities of remedial aid thru contests.

By way of definition I would say that a response to a given situation may, on the part of some, be definitely an estimate and yet, on the part of others, be as definitely a guess. The difference, of course, is in the number of relevant facts which the individual calls to mind and uses in the situation. I am not discriminating in this presentation between responses of the one kind and those of the other. I am assuming that the situations chosen are so common in our lives that the responses of farm reared college students now in their junior year, preparing to teach vocational agriculture, are really estimates.

In several trials of this idea of testing the ability to estimate, I have asked my students to respond to several readily understood situations—situations which are illustrations of judgments which arise in the lives of almost any farm boy or farmer. I also demonstrated the idea in the form of a contest at an annual F.F.A. Leadership Conference in which ten delegates were selected at random and asked to give their estimates on some common values. In this article I am reporting the results obtained in a class of 42 students, all of whom were juniors in the College of Agriculture. They were asked to give their estimates of ten values as follows:

1. What is the length of this room? (The room was the classroom in which they met daily.)
2. What is the great diagonal of this room?
3. Looking out of the south window you see the B. and Z. Building. What is the distance between these buildings?
4. Estimate the distance from the window sill on the second floor of the B. and Z. building to the ground.
5. On the blackboard are two dots. What is the distance in inches between them?
6. On the farm you have occasion to estimate the weight of cattle, hogs, and sheep. Lacking one of these this morning, what do you estimate is the weight of your teacher?
7. Here is a small package such as you might buy in a grocery or hardware store. Pass the package around the class and estimate its weight.
8. You are familiar with the campus "oval" over which many of you have marched repeatedly in military drill. What is its area?
9. Here by the table is a milk can with some water in it. Look into the can, tilt it if you wish and estimate the amount of water.
10. In the south wall is the bay or opening in which the three large windows are set. How many square feet are in this area?

These were the calls for estimates. The 42 students responded with great interest, and likewise their interest in the results tabulated on the blackboard was unusually keen. It is not necessary to record the responses of all the students. For the accompanying table I selected 10 responses and included the range and the correct answers. Observe these results carefully. Does it seem possible that after lifting a 3½ pound weight, one student would estimate it as seven pounds and another as ½ pound? Does it seem possible that a distance of 62 yards would be estimated as 200 yards by one and only 30 yards by another? Or that an 18½ acre area would be estimated as 30 acres and at the same time as six acres? If these students may be assumed to be average farm reared young men, is it not probable that the farm boys of our vocational departments may be equally faulty in the accuracy of their estimates, even if we admit the weakness that stating merely the range of values reveals?

WHAT can we do? First, we must be really convinced that the situation deserves our remedial assistance. Second, an application of remedial measures calls for numerous practice situations presented under educational direction. This latter step calls, first of all, for *practice* in *true-to-life values*. There is no need to estimate the weight of a large stone in the yard if there is no call in the normal lives of boys to estimate the weight of stones. On the other hand, estimating the weight of a quantity of milk in a pail, or of a partially filled sack of grain, or of a package of this or that size, is justified since farm life calls for these estimates. Likewise, do not estimate these values in weight if volume is the appropriate life unit.

Again, in making estimates, *reasonable deliberation should be allowed, but not too long.*

Table of Estimates of Common Dimensions, Weights, Volumes, and Areas Made by Students in Agricultural Education at Ohio State University

(Of the estimates made by 42 students, only those of 10 students are here included)

Value Estimated	Range of Estimates	Correct Answer	Estimates by Ten Students									
			1	2	3	4	5	6	7	8	9	10
Length of this room?	42–20 ft.	32 ft.	30	30	30	30	35	32	42	20	30	30
Diagonal of this room?	60–26 ft.	41.7 ft.	36	45	45	40	45	48	60	26	50	45
Radial distance to next building?	200–30 yds.	62 yds.	60	60	200	65	60	90	70	60	40	100
Distance from window sill of next building to ground?	80–24 ft.	43 ft.	36	50	45	30	25	80	35	50	40	65
Distance between two points of blackboard?	52–32 in.	46 in.	52	45	42	38	45	42	32	36	40	45
Weight of teacher?	237–175 lbs.	225 lbs.	204	190	210	198	205	185	230	198	200	175
Weight of small package hefted?	7–½ lbs.	3½ lbs.	3½	3	4½	5	7	1½	2½	4	2	3
Area of campus "oval"?	30–6 A.	18½ A.	14	14	20½	30	10	12	9	10	11	20
Quarts of water in milk can?	7–1¾ qts.	2½ qts.	1¾	3	3	2	2½	2	3	3	2	2½
Area of wall panel in this room?	120–64 sq. ft.	87 sq. ft.	100	120	75	70	80	85	110	85	80	100

Highlights of the Southern Regional Conference*

D. M. CLEMENTS, Federal Agent, Agricultural Education

THE theme of this conference was "Adjusting the Program of Vocational Agriculture for 1942 to Meet the Needs of the War Effort."

D. M. Clements

Supervisors and teacher-trainers were present from every State in the region. Puerto Rico was not represented. The conference was informal, but a very serious one. Every representative was anxious to make the best contribution possible to Vocational Agriculture's war effort.

The outstanding features were:

1. The work of the homemaking and vocational agriculture representatives in working out ways and means of providing adequate nutritious foods on the home farms so that food normally purchased by farm families could be released to feed the United Nations. Plans were made to jointly develop home gardens and to see that the surplus was sold, canned, dried or otherwise processed. Special effort will be made to provide joint evening classes on those problems that affect the farm families.

2. Supervisors and teacher-trainers made plans whereby organized instruction would be carried out with more farmers than ever before in order that the goals for the foods proclaimed by the Secretary of Agriculture would be met. Definite plans were made for working with County War Councils and the Agricultural Adjustment Administration.

3. A redirection and redoubling of effort will be made along the following lines:
   a. Conservation
   b. Avoiding waste
   c. Saving
   d. Repairing and overhauling machinery.
   e. Reconditioning and using machinery.
   f. Sacrifice
   g. Wiser use of time, labor, money, and talent
   h. Increasing production of certain commodities
   i. Using substitutes
   j. Readjustment of fixed expenses

4. Definite reports were brought in on five major problems:
   a. Ways and means of conducting evening classes on Food for Freedom and Farm Machinery Repair
   b. Farm Family Living as it relates to the war effort
   c. The organization and use of subject matter essential to the war effort
   d. The activities of the Future Farmers of America necessary to assist in winning the war
   e. The training of special teachers to meet the demands in the Food for Freedom program

5. The conference agreed to adjust the program of vocational agricultural education for 1942 to meet the needs of the war effort in the following ways:
   a. Provide special instruction for efficiently reaching the food production goals
   b. Prepare and distribute subject matter
   c. Provide an adequate supply of teachers
   d. Participate in special war activities

*The Southern Regional Conference was held in Atlanta, Georgia, January, 20-23, 1942.

Underconsumption of Knowledge and Skills

M. C. GAAR, Teacher Education, Morgantown, West Virginia

AMERICAN farm boys and adult farmers possess more knowledge and skills than they use. In order to appreciate this fact may I suggest that you, as a vocational agriculture teacher, get in your car and drive out thru your community and observe farm practices. Keep in mind the extent of the agricultural education program for all-day, part-time, and evening class members, and in addition consider the work done by other agencies during the past decades. Notice soil and water conservation practices, forest practices, pasture improvement, care and repair of farm buildings, farm and home sanitation, livestock improvement, and crop rotations. With an open and unbiased mind make an evaluation of the educational program in terms of improved practices observed.

There are some few farmers who put into practice what they learn. They find it to be profitable to put into actual use the things that they have learned about their farming business. Farm boys and adult farmers who put their knowledge and skills into operation grow in knowledge and secure additional skills. We should have more of these people and I believe that we could have more if we set up more specific courses of study and improved our methods of teaching. Our teaching is either too general, includes nonessentials, or in too many cases, is carried to the informational stages only.

All-day, part-time, and evening class members attend classes year after year, decide on useful approved practices, go home, and too many of them will do little or nothing toward the adoption of these practices. For example, in our all-day classes we teach the job of pruning the home orchard. In many cases the class will go out on a field trip for a demonstration and do some actual pruning, yet most of the members will not attempt to improve their own home orchard, the improvement of which is the primary justification for teaching the job. With the adult group, soil conservation is a very common topic. As a result of class discussion definite superior practices are decided upon and still many of the class members will go home to do nothing about their adoption. It may be said that farmers maintain the attitude that it is good to have knowledge about farming and possess a certain amount of skill, but many farmers never worry about using these in their farming operations. No people on earth do as little in proportion to what they know as the average American farmer. Perhaps this may be termed our "cherished American tradition," however expensive it may be.

Some Suggestions

Ways and means for solving this very important problem are paramount. Below are some general conclusive statements that may be of assistance in dealing with this problem:

1. Evaluate and reevaluate the course of study to determine objective significance of each enterprise and job. To what extent do they contribute to the major objectives of vocational education in agriculture?

2. Restate farm jobs making larger teaching units, thereby conserving time in the processes of introduction. Job analysis may be profitably considered in many cases.

3. Eliminate some jobs to be replaced by more recent and current jobs.

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In life we come thru with the estimate rather promptly and "let it go at that." Also, after the estimates are made, the *right answer* should be *provided promptly*. There is no particular improvement in the ability to estimate when the practice is carried on, for example, as the teacher and his boys, riding along the road, estimate the weight of an animal in the field or the height of a tree when there is no opportunity to get the correct answer. Of course, if the teacher's judgment is dependable, his estimate may be accepted as "right" in lieu of standard measurements but the procedure is questionable. I do not object to it as a device for maintaining interest on field trip rides to avoid discipline situations, but it is not the best way to develop the ability to make good estimates. Good educational procedure calls for an *analysis* of the *situation after* the *estimates* have been made whereby each boy is asked to state his basis of making his estimate—what facts did he call to mind and use as an aid to his estimate? It is this fund of facts which the better estimators use, thereby achieving their high degree of accuracy.

Lastly, *repetition* or practice *is necessary to develop* th *ability*. The number of repetitive experiences needed will vary. There is probably little danger of providing too many. And to repeat, use situations calling for *estimates, not guesses*.

These suggestions provide a way of improving the ability sought. Perhaps they are worth a trial. And if you have a meeting of your vocational pupils and their parents, you should try conducting a contest in estimating between your pupils and their fathers. It will be lots of fun.

Supervised Practice

C. L. ANGERER

Planning Supervised Farming Activities

J. G. DIPPOLD, Teacher Education, Columbia, Missouri

J. G. Dippold

THERE is an abundance of economic information gathered by college farm management departments and by the U. S. Department of Agriculture, which shows the varying degrees of success obtained by farmers. Such information is available for practically all types of farming and for most sections of the country. By studying such information a student will know how much more successful some farmers are than others and what the reasons are for such variation. Much to his surprise, in many cases, he will find that the best farmers—the upper 10 to 15 percent—often have earned 300 to 400 percent of the earnings of the average farmer within the same area.

If the student sees that a certain percentage improvement is possible and has taken place on some farms of the community, he will be stimulated to want to make some specific improvement in his own case. Economic information, therefore, is of immense value, not only in establishing aims and objectives toward which the student should strive, but also as a basis for evaluating home farm conditions.

Setting Up Objectives

A typical beginning student in vocational agriculture is concerned most of all about immediate objectives. His general interest and desires for improving his farming practices, however, will be motivated to a much higher degree if he can establish a long range perspective early in his supervised farming activities. A student can be stimulated to imagine himself a partner of a typical successful farmer who has an earning power two or three times the average for his community. Partnership by imagination may be converted soon into realities and the initial steps of planning should be in the direction of making the student a successful farmer himself.

Strange as it may seem, much of our supervised practice planning is done with practically no regard for ultimate values. Some may argue that economic information which brings out the relative performance of adult farmers is subject matter for advanced students. It may also be considered to be pure farm management course material. This idea frequently has its roots in the experience of teachers who themselves have had farm management work rather late in college. Even freshmen in high school, however, have no difficulty in sensing the major significance of the relative performance level of farmers. I would suggest that teachers make an effort early in the vocational experiences of their students to become acquainted with ultimate farming possibilities and constantly refer to these possibilities as a means of developing permanent interests.

Ways and Means

After a student has a keen desire to attain some valid aim, such as to increase his earning power 200 or 300 percent of that of the present average farmer, he will be ready to devise ways and means of planning steps to follow in the attainment of his aim. The normal outcome would be a series of supervised practice activities blocked out by years and designed as a long-time plan. With an appreciation of ultimate possibilities in farming, the student and his teacher will experience little difficulty in making a quick beginning for carrying out the minor steps essential to the fulfillment of the ultimate plan.

Unfortunately much of our economic information which should be helpful in planning a farming program designed for a high labor income, is written in an unattractive manner. An alert instructor, however, will be sensitive to all sorts of possibilities in developing a complete understanding and appreciation on the part of the students of a desired farming setup. The various causes of differences in earning power of farmers must be visualized and converted into familiar local situations or cases. Such information should be so clearly tied up with local experiences that students will develop proper habits of analyzing and evaluating the economic position of local farmers in terms of the desired or so-called successful status. Obviously, the student should mirror his own home farm against the background of the ideal.

In developing and considering his own plans for a supervised farming program, the economic history of the ideal farmer of his community should be reviewed frequently by the student. The instructor should cause a student to discover the fact that a large percent of our best farmers had to go thru a slow process of building an economic foundation from which rapid and accelerated successes were built. Unless the student in his planning work is aware of the fact that ultimate success invariably gets a slow start, he will not tend to be patient nor persistent as he carries out some of the smaller projects which ultimately must grow into supervised farming programs.

Much economic information, as used by instructors and studied by students, is satisfactory insofar as a *knowledge* of desirable aims and objectives is concerned. This, however, will not get desired supervised practice activities into full swing unless the students have a *conviction* that the ultimate ends to be reached are absolutely possible and desirable. The problem, then, is the development of *convictions*. Unless a frequent review is made of such information and coupled with various types of motivation, confidence will not be strengthened. Efforts by students will soon tend to diminish. Since the average student has an opportunity to study vocational agriculture for several years, there are abundant possibilities for such repetitions. At this point it is quite well to remember that economic data in chart form will make it easy for the teacher to review these data and make frequent implications.

What has been said so far in regard to aims and objectives for the farm as a whole, may also be repeated for aims and objectives pertaining to farm enterprises and even to objectives for the jobs within an enterprise. In all cases students must have sound convictions as to the worthwhileness of the ends toward which they work.

Usually it is safe to say that most supervised farming plans stress ways and means and give little emphasis to objectives. We must not forget that the proper use of economic information for developing objectives is perhaps more important than developing ways and means. In fact, it is hard to separate the two factors. It is like asking, "Which is more important, the locomotive of a train or the boxcars?"

Students who develop plans for a supervised practice program require much help from the teacher. This is obvious because most students have had limited experiences on the home farms or within the community. They have established certain habits, attitudes, and emotional attachments which will tend to make adjustments difficult.

Most economic information is a result of investigations and is generally reported in data form. We find that students aren't stimulated enough to use these data in developing approved practices. Instructors may be satisfied if and when the student has studied enough of such information to *know about* its values. To know information and to understand it, however, are two different things. Understanding comes thru frequent analysis, comparisons and contrasts of information. Information to be of use must be related to ultimate and immediate aims and objectives, to major and minor farming activities and experiences, and to the experience background of the student.

The nature of the *principles* of successful farming, as reported in books and bulletins, is not always understood by students. Students are not always aware of the fact that if approved practices are developed on the basis of principles that some error may be expected in applying such principles to individual or specific cases. Since there are many principles to deal with, there are, of course, many opportunities for error. When approved practices are carried out, but do not turn out just as expected, students may become disappointed. If, however, students realize

what the nature of *principles* is they will not become depressed with disappointing outcomes nor over-elated when results are better than average.

Many plans for supervised farming programs are too academic. Students may read about various possibilities for succeeding with these projects and plan carefully on such a basis. They frequently forget, however, to analyze completely those home problems which may inhibit progress. The social and cultural home environment is always powerful in effecting changes or readjustments. For instance, the attitude of the parents, their habits, and many physical factors of the home situation may disrupt ideal plans.

In enabling the student to predict the future, emphasis should be placed upon the value of *principles* as developed from various sources of information. Planning after all is concerned primarily with the future, and emphasis, therefore, should be placed upon *principles* as stepping stones. Most people learn from their own experience how certain practices work out. If, on the other hand, they plan on the basis of *principles*, they will be able to project themselves into the future and anticipate what the outcomes will probably be. Books and bulletins used in developing farming plans are devoid of such imaginary developments. Such insights must be supplied by the teacher and must be aroused within the student. If a student is made aware of the fact that farming practices should be in harmony with sound principles instead of being in harmony with a few isolated cases, the manner of planning for projects will be greatly affected. Creative thinking which must be involved in all planning activities is relatively easy after the student has visualized in his own mind exactly what kind of a farmer he hopes to be some day. Planning then becomes a synthesis of farming principles for creative purposes.

Carrying Out Plans

After approved practices have been planned, there is usually considerable resistance to overcome in putting them into a practice. After such plans have once been developed, the student must take courage in carrying them out. A lack of courage is often brought about by discouraging talk at home or in the community. At this stage the steps of developing convictions must be reviewed; then courage will be regained and the student will stick by his decisions.

Frequently plans for supervised farming activities seem satisfactory to the individuals who prepared them. However, it is important that opportunity exists for group reactions and evaluations to be made of individual plans. To illustrate: If 10 students in a class have swine projects the group can render immense help to each of its members by having one of the group present his plans for group analysis and constructive criticism. It is surprising to know that members of such a group have suggestions that are highly desirable in reinforcing any particular plan. Planning for the future with criticisms and suggestions in advance is by far superior to criticisms after the projects have already been carried out. Many desirable habits of group evaluation may be established and the work of the teaching load lightened. Such group planning, too, is vital as a democratic process that should be followed in later life in planning adult problems.

Supervised Practice Programs

C. B. SENTER, Teacher, Van, Texas

VOCATIONAL agriculture for all-day students, is divided into two parts: classroom instruction, and supervised practice. Most agricultural educational workers agree that far more time has been spent on classroom instruction than on the supervised practice program. Naturally, it has developed much more efficiently than has the supervised practice program. It is time for us to analyze the program critically, and ask ourselves some searching questions relative to the purpose of vocational education in agriculture. The reason for the passage of the National Vocational Education Act was to develop a nation of people technically and skillfully trained for life occupations.

Does our present vocational agricultural program fit the boys we have in our classes for their life work of farming? What percentage of the boys in our classes are going back to the farm? What part of the present program is doing more in fitting boys to be successful farmers?

From our experience during the past ten years with 750 boys, we believe the key to establishing boys in farming is the supervised practice program.

To be sure, the all-day classroom instruction is important and should be co-ordinated in every way with the supervised practice program. Selling the boy on the idea of going back to the farm however, must be done thru a wisely planned supervised practice program on the boy's home farm.

I was very discouraged with the number of boys actually going back into farming. During my first few years of teaching, I began to analyze the situation and saw that there were no inducements to get the boys to stay on the farm. I then began an extensive and intensive adult farm program and almost immediately more of our all-day students began to be interested in farming. I found that by getting the boy into the type of project he enjoyed he did much better with it.

Financing Projects

About this time the Production Credit Association, which operates over the entire nation, began to make loans to vocational agriculture students with the teacher acting as trustee. This enabled the boys to set up better projects.

Since it is now possible for a boy to borrow money at a low rate of interest to begin the supervised practice program of his choice, I feel that it will be much easier to get boys into farming as their life work. The following are concrete examples of this in our area.

Examples

John and Toonie Colman, brothers, finished high school in 1939. They were interested in dairying and breeding Jersey cows. The Production Credit Association lent them money to get into dairying while in high school, as part of their supervised practice program. Today they have twenty-six registered Jersey cows, one of the best bulls in the county, and fifteen good Jersey heifers. They have built milking barns to pass Grade A specifications and have complete electric equipment installed thruout their barns. They have improved their permanent pastures and are growing most of their feed along with other diversified crops. At the present time they are well on the road to becoming excellent Jersey breeders and dairymen.

Royce Wood, a student who finished high school in 1938 with three years in vocational agriculture, was interested in poultry. After finishing school he started into broiler production in a small way. Last year he raised and sold over 15,000 broilers. He built his own house and battery brooders. He now has a foundation flock of White Leghorn hens, and intends to expand his broiler production to breeding and hatching.

Jarrell Rhodes finished high school in 1937 with three years of vocational agriculture. He was interested largely in truck farming. After finishing high school he attended an agricultural college for one year, and then came back to farm with his father. He sold his dad on the idea of converting their cotton farm into a diversified farm with special emphasis on sweet potatoes, tomatoes, and melons. After three years of this type of farming, which was started the first year in a small way, they built a new home and paid cash for it while making many improvements on their farm. Today the son and father are two of our best leaders in our farm program.

We could continue with example after example of what a supervised practice program has done for our boys. Today many of these boys are going into the army and other service branches, but after it is all over and the world once again is made safe for men and women to live in as they would like to, we believe you will find these boys back on the farm. They believe in the future of farming with a faith born not of words but of deeds.

Underconsumption of Knowledge and Skills

(Continued from page 207)

4. Minimize the amount of time to be spent on teaching jobs for general information.

5. Assist students in setting up long-time supervised farming programs based on present needs.

6. Include in the course of study only those jobs that class members need, and can and will put into practice. Spend more time in teaching jobs thoroly and thru to adoption.

7. Spend more time in getting practices into operation thru organized objective home visits and by frequent checkups in class.

8. Set up an advisory committee for the purpose of providing council upon important teaching problems relating to the school and community. The advisory committee can be of special significance during these emergency periods.

When tillage begins other arts follow. The farmers, therefore, are the founders of human civilization.—Daniel Webster

J. B. McCLELLAND **Farmer Classes** W. H. MARTIN

Just Monkeying Around

MARK NICHOLS, State Director, Salt Lake City, Utah

ONE hot summer afternoon a number of years ago, a vocational agriculture teacher stopped at the farm of an all-day student on a regular visit of supervision. He was informed by the mother that John, the student, was down in the field hoeing his sugar beets. Upon arriving at the beet patch the teacher looked in vain for John. The beets were very weedy, but there were some evidences that John had done a little work earlier in the day.

In a swamp some distance away he heard voices and proceeded in that direction. To his surprise and amusement were John and a neighbor boy stark naked except for shirt and hat, busily engaged in chasing mud hens. He sat on a hill overlooking the scene and and watched the proceedings without making his presence known. The boys dashed here and there, sticks in hand, chasing these water birds thru the reeds and bulrushes yelling at the top of their voices, and apparently having a great time.

"What are you fellows doing?" the teacher shouted. The answer came back spontaneously. "Nothing, just monkeying around."

All-Day Programs Have Been Stressed

In recent years the question is often asked, "What are we accomplishing with adults in evening class programs?" And the answer comes back often-times all too obvious, "Nothing, just monkeying around."

The Federal law in this regard is clear when its sets up as an objective of vocational agriculture the training of present and future farmers for proficiency in farming.

It is only too clear to the onlooker that our program, up to date, has been top-heavy in giving emphasis to training the future farmer. The explanation for this is quite clear cut. It is easier to deal with a boy than a man. Less responsibility is ordinarily involved. Mistakes are less apt to be detected. Generally, the boy does not have to face the realities of major situations involved in farming due to the fact that he is at home with his parents. School executives have not regarded evening class work as in the realm of their responsibility. These and many other items could be mentioned as to the reason the all-day program has forged ahead of evening class work in the minds of vocational agriculture teachers and school administrators. However, it is refreshing to note from reports of the U. S. Office of Education that the tide has been changing in recent years, and evening class programs are playing a more important role in the scheme of things.

Turkeys on Farm of One of Moroni Turkey Growers—Equipment Made by Member

Many Agencies in the Field

In the past, many teachers have felt there was little need for conducting evening classes. This is only natural when we make an analysis of what is happening in the average community. The Agricultural Extension Service, thru its specialists and county agricultural agents, is offering help to all farmers in a general way. The Farm Security Supervisor is dealing with farmers in the low income brackets. The various governmental credit agencies are giving counsel to farmer borrowers along the lines of sound credit. The Agricultural Adjustment Administration is carefully checking farm practices in crop rotations and soil conservation. These and many other agencies are giving help to adult farmers which is either directly or indirectly educational in nature. Is it little wonder that many vocational agriculture teachers feel that enough help is already being given the farmer to increase his farming proficiency?

An observation of the farming situation in most rural communities reveals, however, that there is a big niche to be filled by the vocational agriculture teacher thru systematically organized evening course instruction and supervision.

Member of Moroni Turkey Growers Association

Improved Techniques and Clearer Understanding Necessary

Techniques in instruction and supervision have made great progress over the years in the all-day program. Few will question the need of more adequate techniques in this regard with evening class programs. At least this is the case in Utah where vocational agriculture departments conducted an average of 1.8 evening courses per department during the year of 1941. This figure has been rather constant for the last three or four years in our state.

It is interesting to note what has been accomplished from year to year in evening class work. A department will offer farm and home beautification one year; dairying and farm machinery courses the next year; poultry the third; and vegetable gardening the fourth. This is typical of the evening class programs in many schools. Many teachers maintain that such a varied program of instruction

over the years is based on surveys of community needs. Others have felt that it is a reflection on their efficiency to repeat an evening course in the same enterprise a second year.

Long-Time Evening Programs Bring Results

For many years we have been promoting long-time programs with all-day students. Perhaps we should be giving more attention to long-time programs in our evening classes. Are we "just monkeying around" in this regard, or are we accomplishing something really worthwhile that will result in genuine worth to the individual farmer and the community? A casual observation of some long-time programs along single enterprise lines merits our serious consideration.

Illustrations of Long-time Programs

Thirteen years ago Eldon Westenskow was employed as vocational agriculture teacher at Moroni, Utah, a small rural community of general farmers and sheep raisers. A survey of the community impressed Mr. Westenskow with the fact that turkey production could be made profitable on many farms. An evening class in turkey production was conducted. Evening courses in turkey production have been conducted by Mr. Westenskow most of the years since, with two courses per year carried on during the last three or four years. A year ago the farmers in these courses purchased 125,000 turkey poults, and they exceeded that number this year.

An outgrowth of these evening programs has been the organizing of the Moroni Turkey Growers' Association. Two years ago, these farmers purchased a feed and storage plant and now buy their feed co-operatively in carload lots. They mix their own mashes, and co-operatively purchase their poultry supplies.

Last year they purchased their own killing and dressing plant and paid one-third of the indebtedness on it thru the earnings of one year's processing returns. An improved marketing setup is on the docket and a co-operatively owned hatchery is one of the next steps. Hundreds of thousands of dollars worth of business is conducted by these turkey growers each year.

Laurence Kelson, the farm-mechanics teacher in the Moroni department, has contributed to the evening program instruction very greatly by helping the members with their construction and mechanical repair problems in feeders, brooders, coops, and turkey equipment.

Fifteen percent of the turkeys produced in Utah are grown by the Moroni Turkey Growers. Each year the community holds its annual "Turkey Day" celebration. The flocks number in size from 1,000 to 10,000 birds per member. The growers ship in more than 80 percent of their feed. Moroni is no more favorably situated for turkey production than are numerous other rural communities in Utah, but the farmers have been taught how to do the job profitably as a result of a number of years participation in evening-class programs. A long-time program in turkey production has been worked out by a far-sighted teacher of vocational agriculture. From present appearances, evening programs in turkey production will continue for many years at Moroni.

Another instance of a long-time program in evening-class work is found at Nephi, Utah, where James M. Anderson is the vocational agriculture instructor. A number of years ago the farmers of this community purchased a few purebred Suffolk sheep. Mr. Anderson noted the need of co-operative effort on the part of the owners of these small farm flocks of Suffolks. Accordingly, an evening class in Suffolk sheep production was conducted in 1939. It was repeated in 1940 and again in 1941. After three years the farmers find they still have a lot more to learn about Suffolks.

Co-operative activities as a result of the program have been the organizing of the Nephi Suffolk Breeders' Association with a constitution and by-laws, and a program of breed improvement, dipping the sheep co-operatively, pooling the wool clip, conducting an Annual Suffolk Show and Community Suffolk Day where hundreds of fine Suffolks are exhibited by the 40 breeders. An advertisement in a national livestock journal by these Suffolk breeders brought a buyer from Texas to this community who purchased a carload of purebred Suffolk rams in August, 1941.

From all indications the evening program in Suffolk sheep will continue to function in Nephi for a long time to come. A long-time program has been established and an impetus has been given to a profitable industry in the community. Living in Nephi is being made more desirable and worth-while as a result.

Many other such examples of long-time evening programs in Utah could be mentioned. Two blades of grass are literally being made to grow where only one grew before. The programs become a regular part of community life.

In contrast to these long-time programs there is the piece-meal effort of jumping from enterprise to enterprise, year after year, without spending enough time to accomplish definite results in programs which do meet community problems and needs. With such effort there is difficulty in promoting class membership, very few farm improvements or improved practices result, and worth-while outcomes are difficult to find. Such evening courses are hard to justify. No program of continuity is established. Little is accomplished by "just monkeying around."

Developing an Evening-Class Program

T. E. ELLIS, Caledonia, Mississippi

MY FIRST step in setting up an evening-class program in Caledonia community was to make cross-section surveys of 40 farms representing the community. From these surveys it was found that 75 to 80 percent of the farm income comes from cotton. Cotton plays a very important part in the welfare of Caledonia community. It was interesting to find 14 varieties of cotton grown in the community and as many as three varieties being planted on one farm. Terracing was about the only soil-conserving practice found. Facts relative to pasture conditions showed three to five acres were required per animal for grazing. Breeding practices were carried out on the basis of convenience without regard to improvement.

Since November, 1938, we have had 49 classes and reached approximately 250 farmers thru organized instruction. In the main, these classes were on cotton improvement, soil conservation, livestock improvement, and feeding.

Our first group meeting was devoted to a study of conditions found in our cross-section surveys. Officers were elected and committees appointed. The committes consisted of a program committee, attendance committee, and social committee. Organizations were perfected in each center where classes were to be held. The functions of the above committees are obvious and we find that they are an indispensable means of keeping our program of instruction based on vital points of interest to the community.

One Variety Cotton Club

The first suggestion offered by our program committee was to set up a definite program for improving our cotton. After thoroly investigating the leading varieties, D & P. L. 11 A. was adopted as a community variety. Officers were elected to devote their effort to cotton-improvement work. The designated officers and directors of the One Variety Cotton Club functioned in setting co-operative gin days, and selecting ginners to co-operate in ginning the cotton and in saving the seed. They also functioned in an advisory capacity in buying and selling seed, handling winter cover crop seed, and in other co-operative marketing activities sponsored by our vocational agriculture department.

In 1938 our gin records show an average turnout of 38 to 39 percent lint. In 1940, with a bad cotton year, our records show almost 41 percent lint average. The production per acre has also shown considerable increase over mixed and poorly handled varieties.

Our One Variety Cotton Club also sponsors an annual all-day free barbecue for the members' families, their friends, and guests.

Each year we try to have a major theme around which to build our evening-class program. The first year our theme was cotton improvement; the second year, cotton improvement, soil conservation, and livestock improvement. Altho we build our program around a central theme for the year, we try at all times to be on the look-out for any problem or problems that may require immediate action. As an example, last July it was called to our attention that quite a bit of corn in the community could not possibly make any grain, and by co-operating with the local field man for Kraft Cheese Co. we put on a series of educational meetings on the use of silage as a winter feed. This instruction was instrumental in saving 300 tons of corn, sorghum, and soybeans for silage.

The attendance at our classes has been very gratifying. At our Caledonia center we have an average attendance of approximately 50 farmers. This is due to

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Farm Mechanics

L. B. POLLOM

Building a Farm Shop

BRUCE HARRISON, Teacher, Bandana, Kentucky

THE Bandana High School is located in the extreme western part of Kentucky. This community is typical of many farming sections of Kentucky, and, like most other rural areas, has witnessed the passing of the village blacksmith shop. Realizing that the blacksmith shop has passed and seeing the farmers having to drive more than five miles to get the smallest piece of repair work done, the teacher of vocational agriculture, the Future Farmer Chapter, a few of the part-time young men, members of the faculty, and some of the adult farmers in the community began in January of 1941 to make plans to erect and equip a farm shop.

The first plan was to ask the Ballard County Board of Education to furnish the material to construct the building. This plan failed for two reasons; first, because the Bandana community was the first in the county to pioneer in this type of vocational education and one of the first in the extreme western part of Kentucky; second, the school board did not feel financially able to assist with the program. After failure to secure any help from the school board, a plan was made to raise enough money in the community to start the building. A letter was drafted which stated the amount of money that would be needed to erect the building. The letter also gave the people some idea of what the shop would be worth to the school and community. This letter was given to the school children on Monday, and by Wednesday evening of the same week $400 in cash and materials had been contributed. The erection of the building was started and by the time the contributions had been used the County Board of Education, seeing the interest that the Bandana community was taking in the project, furnished the necessary money to finish the 28- by 66-foot building.

Community Farm Shop at Bandana, Kentucky

The Future Farmer Chapter has constructed and secured a number of pieces of machinery. The National Defense Shop Program has added to the tool list until sufficient tools are available to do such work as farm carpentry, tractor and truck repair, electric wiring, electric welding, and general farm-machinery repair.

The Shop Program

Three groups of people are being served by this shop—the Future Farmers, the out-of-school youth, and the adult farmers.

The phase of the farm-shop program which has probably rendered the greatest service is the program for adult farmers. Practically every farmer in the community has been to the shop to do some work and many of the farmers have done a large share of the necessary repair work on their farm machinery in the school shop. Farmers as well as farm boys enjoy this type of work, and they realize how very profitable it is for them to do their own repairing.

Four OSY programs were taught last year in carpentry, elementary electricity, tractor mechanics, and metal work. One OSY course in metal work is being taught at present. Due to the fact that farm machinery will be higher this season and harder to secure, most of the time this winter will be spent in repairing farm machinery.

A brief description is given of the program that has been followed in the community farm-machinery repair work, and of some of the things that the adult farmers have been able to accomplish for themselves. The first problem was to find a means of financing the shop program and to keep the shop open during the summer. A crippled boy was employed, for a small cost, to open the shop in the morning and to remain there during the day to check out tools to the farmers. One of the duties of the keeper was to collect a small sum from each individual who used the shop. The money collected was used to pay for the electric current and to pay the one who kept the shop open. In all cases the men did the work themselves except for electric welding of broken parts which was done by some of the boys who had learned welding in the OSY courses during the winter months.

An average of 20 farmers used the Bandana shop daily during the spring and summer months of 1941. Progress is shown by the fact that most of the farmers are able to do almost any farm-machinery repair work with very little assistance.

Farm-Shop Exhibit

A. T. Sowder, Teacher,
Surry County, Virginia

AS A means of selling the farm-shop program to the community and creating interest among members of the class, a farm-shop exhibit at local fairs has excellent possibilities. It also has developed into a method of financing the F.F.A. Chapter. With these three objectives in mind the Surry F.F.A. Chapter prepared a farm-shop exhibit for our local fair this year.

Arrangements were made by an F.F.A. committee with officials of the local fair whereby the Chapter would be paid $13.75 for preparing the exhibit. We were also granted the privilege of selling the articles displayed. Since we cleared $6.50 on the articles sold, our total profit for the exhibit was $20.25.

After making all arrangements with the fair committee for the exhibit our next job was to select articles to be made. In our section of Virginia, peanuts, corn, and hogs are our main enterprises with small grains making rapid advances. We decided to build a self-feeder for hogs, a watering trough for hogs, a hog loader, and a grain treater. These articles were made in the shop by third- and fourth-year boys. All articles were planned before construction and were made as nearly perfect as possible.

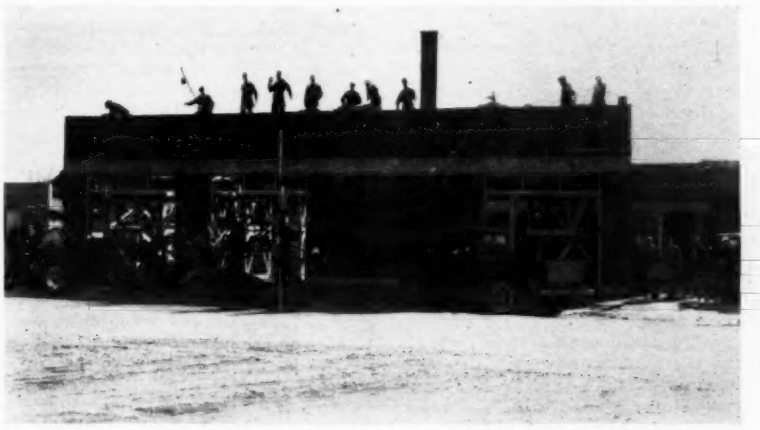
Since small grains are making rapid gains in our county, we decided to give a demonstration on treating small grains for smut. Four boys were selected to give the demonstrations, two to work in the morning and two to work in the afternoon. Farmers were interested to know the method used in treating small grains and to discover that they could easily build a Minnesota grain treater at home. These boys who gave the demonstrations stayed with the exhibit and answered visitors' questions regarding the farm-shop program.

In preparing a farm-shop exhibit, be sure your selection of articles to be exhibited is suitable for your community, and that they are well built and displayed.

Developing a Successful Farm-Shop Program

THOMAS E. MABERLY, Teacher, Rupert, Idaho

IN MAKING suggestions to the teacher or prospective teacher of vocational agriculture, one should realize that in the last analysis a farm-shop program is just as successful as are the capabilities and initiative of the teacher. Because of the broad latitude of jobs included as farm-shop jobs, it is exceedingly difficult for any training institution to provide a program which will develop a farm-shop teacher completely skilled in all the tasks a farmer has to do. The trainee should not expect that his pre-service training courses will make him a carpenter, plumber, harness maker, and the like. Much time is required to learn these trades, and in many cases, especially under present conditions, financial remuneration in the above-mentioned occupations is greater than in teaching. The prospective teacher should, of course, expect to get the fundamental essentials to use as a foundation in developing his efficiency. This means that the teacher is going to have to expect to put considerable time in actually doing jobs that he expects to teach his boys to do. Boys have respect for a teacher who can pick up a saw or a pair of tongs and a hammer and show them how a job is done.



Farm shop class working on new shop building

Contacts with local tradesmen are also invaluable aids to increased occupational efficiency of the teacher. One may learn more about soldering and sheet metal work in a half hour in the shop of a local tinsmith than during a whole course in college.

Organizing the Shop Program

Organization is another problem that each teacher must work out for himself. It is essential to adopt a system of organization and make it function. As alterations become necessary, make them. Lack of organization means failure, and over-organization, to the extent that the routine involved reduces the time the students are able to spend on the jobs they want and need to do, should be avoided.

The proportion of time spent by the several all-day groups in the shop should be carefully studied by the teacher. There is danger of overbalancing the farm-shop program because boys like the work and the teacher finds it increasingly interesting to teach. It is felt at the present time in Idaho that not over 35 percent of the boys' four-year course should be spent in shop. Further study of this problem is being made at the present time.

Equipment

Another important factor is the facilities with which the teacher has to work. The shop must be large enough to permit space for the largest jobs on which the boys will want to work. It is impossible to build hay racks, feeders, trailers, or overhaul large farm machinery if there is not adequate room to keep them safely while they are being built. A floor space of 2400 square feet is not too much room for a department of 60 to 80 high-school boys and the part-time and adult class groups. Tools and equipment must be selected according to the type of farming and the needs of the individual departments. Suggested lists which will help teachers in starting a shop program are available in many states. The very best quality tools obtainable are the only kind which will stand up under the hard use which boys give them, and are therefore the cheapest in the long run. Many of the tools purchased 12 years ago for the Rupert department are still good and are being used regularly.

Location of Equipment

Considerable thought must be given to the location of the larger pieces of equipment so that they will be conveniently located in relation to the work they are to do.

The ultimate objective of an efficient farm-shop program is to turn out boys well trained in performing the shop jobs which they will need to do as farmers. The only concrete test the farmers, school administrators, and other people in the community can apply is to check on the amount and quality of the work being done. To summarize in three brief sentences:

1. Learn all you can by *doing* shop jobs yourself.
2. Organize your shop and your boys so that the maximum amount of work can be done and the greatest efficiency acquired.
3. Stay on the job in one location long enough to develop the confidence of the whole community in your program.

Evening-school Program

ERNEST M. CHRISTENSON, Teacher, Wagner, South Dakota

THE Vocational Agriculture Department of the Wagner High School has just finished its second series of evening-school meetings for adult farmers of the community.

This year's series of meetings was given over to problems of the dairyman of Charles Mix County. Since most of the farmers of this community milk a few cows for a little supplementary income, the term Dairyman includes all farmers.

Content of Course

The first of the meetings was a demonstration of the Babcock Cream and Milk Test. Each man, having learned to do his own testing by this method, was assigned a night on which he could bring in the milk samples of each individual cow, of his dairy herd. Many of the men were surprised to find that the cow they thought to be their best was the poorest so far as butterfat was concerned. By testing the dairy herd, one can identify the "boarders" and weed them out.

The next three meetings of the series had to do with the subject "Building Up the Dairy Herd." Such problems as the following were discussed: "Selecting Dairy Cows," "Selecting Dairy Sires," "The Value of Proven Sires," "Building Up the Herd With the Registered Sire," "The Advisability of Cross-breeding," "The Use of Inbreeding to Establish Character Traits in the Herd," "Artificial Insemination," and many others. The class decided that this community can use a lot more purebred sires with its herds and that more personal attention needs to be given the dairy herd by the owner.

Two meetings were devoted to the study of "Balanced Rations for the Dairy Cow." The process thru which a cow puts her feed was studied in detail to find out just what happens in the various processes of digestion. With this in mind they set out to find the best ration for the cow in order to make her the most efficient producer. Several balanced rations were worked out according to the "Henry Morrisons Feeding Standards," using the available feeds of the community.

Another meeting was for the purpose of studying the various things the dairy herd manager should be prepared to do in regard to sickness and disease in the dairy herd. Most of the time was spent in the discussion of bang's disease and mastitis in the dairy herd. In both cases, sanitation was stressed as the best method of control or prevention from spreading. Feed pail scours, warts, anthrax, hem-

(Continued on page 218)

Studies and Investigations

C. S. ANDERSON

What Becomes of Graduates in Agricultural Education?

OLIVE A. SALEM, Research Assistant, Virginia Polytechnic Institute
Blacksburg, Virginia

TEACHERS of vocational agriculture have been trained at Virginia Polytechnic Institute since 1918. During the period 1918–1940 approximately 432 persons, only two of whom have been women, have become qualified to teach agriculture by studying in the Department of Vocational Education. From an average of nine graduates per year for the first five years, the number of men granted degrees has increased to twenty-five per year for the last five years.

Olive A. Salem

What has happened to the men who studied to be teachers of agriculture? Have they gone into and remained in teaching? Have they succeeded professionally and financially? Has the vocational education program of the state expanded sufficiently to give employment to the increased numbers of men trained? These and other pertinent questions were partially answered by Mason H. Pulley in a thesis presented to the department of vocational education at Virginia Polytechnic Institute. This article is based chiefly on information compiled by Pulley and supplemented by further research by the author.

Bachelor of science degrees had, on September 1, 1940, been granted to 290 men who had majored in agricultural education; and master of science degrees to 51 men, twelve of whom had already received the bachelor's degree in agricultural education. This was a total of 329 men who had received a bachelor's, master's, or both degrees in agricultural education. The other men qualifying to teach agriculture held degrees from other colleges or from other departments of the Virginia Polytechnic Institute.

Men Trained for Teaching Follow That Occupation

The majority of men who have studied to become teachers of vocational agriculture have gone into and remained in the work for which they prepared. Pulley states that 86 percent of the men who have qualified to teach vocational agriculture have at one time or another engaged in this profession. He also states that approximately 60 percent of the men who had qualified to teach held positions as vocational agriculture teachers in Virginia or other states during the 1939-1940 school year. The author has found that during the 1940-1941 school year 157 of the 221 agriculture teachers in Virginia held a degree from the Vocational Education department at V. P. I. These were 48 percent of the men who had received degrees from this department.

Another interpretation of the figures that only 71 percent of the agriculture teachers in Virginia during 1940-41 held degrees from the department at V. P. I. The others had qualified to teach by taking short courses in the department. In other words, the numbers being graduated are not sufficient to meet all the calls for teachers of agriculture. The needs must be met by offering special courses to men who have not majored in the department. This fact should be encouraging to young men trying to decide whether or not to come to college to prepare to teach agriculture. The vocation continues to offer opportunities to trained men.

The list of teachers for 1940-41 contained a higher percentage of recent graduates than men who had graduated in the early years. Six percent of the 157 had received their degrees during the first five years of the department's existence and 50 percent during the last five years. Several reasons might be given to explain this tendency. The older, more experienced men are constantly being called upon to take positions involving greater responsibilites than those connected with teaching agriculture in high school. Some of the graduates of earlier years have died or have been retired. However, that not all of the men are using the vocation as a mere stepping-stone to other fields of work is attested to by the fact that in 1940 approximately 40 percent of the teachers in Virginia had been teaching ten or more years.

Agricultural Teachers Do Not Move About

The majority of agriculture teachers do not change from one school to another. Pulley found that of 242 men who taught in Virginia at one time or another during the years 1928-1938, 173, or approximately 73 percent, held just one position. It would seem then that long service and constancy in position are outstanding characteristics of the profession.

Table 1. Tenure of 242 Vocational Agriculture Teachers in Virginia, 1928-1938

	Number	Percent
No change	176	73
2 changes	57	24
3 changes	8	3
4 changes	1	1*
Total	242	100

* Actual percentage less than 1 percent.

No figures were given to show the average number of years the men remained in one position. The study may have included a great many beginning teachers or teachers who, after trying one teaching job, had left teaching for some other type of work. Also, this period included the years of the depression during which the man in a salaried position was indeed fortunate. He usually appreciated this good fortune to the extent of doing everything possible to retain it. Hence the turnover of teachers may not have been normal.

According to Pulley's study, increase in salary was not the incentive that held men in one position during the 1928-1938 period. The median beginning salary for the 176 men making no change was $2000 and the final salary was $1800. These figures would point to the aforementioned possibility of the presence of many beginning teachers within the group. The beginning teachers were unfortunate to enter during a period when salaries were low and increases small and rare. Two statewide 10-percent "depression" cuts, one of which was later restored, also influenced teachers' salaries.

The changing of teaching positions was in most cases accompanied by a slight increase in salary. However, not enough cases of men changing positions were included in the study to draw definite conclusions concerning a causal relationship that might exist between the number of changes and decrease or increase in salary. No cases were on record of just one change; one man made four changes during the period.

Degrees and Salary

Information concerning degree held and its influence on salary revealed these facts: Of the 242 teachers during the period 1928-1938, 234 or 97 percent held bachelor's degrees and the remaining 3 percent held master's degrees. The median annual salary for holders of bachelor's degrees was $1750, while that of the holders of master's degrees was $2200, an annual increase of $450. Would this increase be sufficient to offset the expense of acquiring the degree? Increases for four years would be needed to make up the one year's salary lost, and increases for approximately two years would be needed to pay the cost of one additional year of schooling. After five or six years the holder of a master's degree who remained in teaching could expect to be better off financially than the holder of a bachelor's degree. Obviously other factors would have some bearing on these salary increases.

Professionally, the holders of master's degrees have an advantage over those holding only the bachelor's degree. When higher positions are open, the holders of master's degrees are usually the ones to be called to fill them. Percentages in this study tended to prove this to be a fact. Approximately 49 percent of the men who held bachelor's degrees only from the agricultural education department at V. P. I. were teaching vocational

Table 2. Occupation and Income Distribution of 400 [432] Men Qualified at V. P. I. Since 1918 to Teach Vocational Agriculture

Occupation, 1939-1940	Number	Percent	Median Salary
Vocational Agriculture Teacher	262	60.6	$1895
Other Educational			
Agricultural:			
County agent	11	2.5	$2633
Soil conservation	12	2.8	2600
Farm security	10	2.3	2100
Administrator supervisor	7	1.6	3350
College teacher	5	1.2	3474
Other	12	2.8	....
Total	57	13.2	....
Nonagricultural:			
Principal, teacher	20	4.6	1500
County superintendent	5	1.2	3000
Other	7	1.6	....
Total	32	7.4	
Noneducational			
Agricultural:			
Farming	10	2.3	.....
Southern states co-operative	8	1.9	3000
Farm manager	2	0.5	2100
Other	2	0.5	....
Total	22	5.2	.....
Nonagricultural:			
Salesman	12	2.8	2750
Physician, dentist	2	0.5	5500
National Youth Administration	3	0.6	2600
Other	10	2.3	....
Total	27	6.2	....
Deceased and Occupation Not Known	32	7.4	
Total	432	100.0	

agriculture in Virginia in 1940-1941, while only 37 percent of the ones who had been granted master's degrees were found teaching agriculture in Virginia during the same year. Twenty-four of the 51 men with master's degrees had been promoted to positions involving greater responsibility and opportunity.

"Approximately 40, or 32 percent, of the 432 graduates, postgraduates, and qualifiers in vocational agriculture at V. P. I. since the establishment of the department have entered occupations other than vocational agriculture teaching." The occupations entered are quite varied, altho most of them are very closely associated with education, agriculture, or both. Pulley discovered 76 different ones which he grouped in tabular form as in Table 2.

This table shows that the men who studied to teach vocational agriculture made definite use of their training. In 1939-1940, 86.4 percent of the men were in agricultural or educational work. Their training for and experience in teaching vocational agriculture served as a definite preparation for their life work.

The men who left vocational agriculture teaching for some other occupation received better salaries than the ones who remained in the field. The one exception was the principal or teacher of academic subjects in the public schools, whose median salary was approximately $400 lower than that of the agriculture teachers. However, these principals and academic teachers usually render only nine or ten months' service a year instead of the twelve months of the agriculture teacher. Therefore, if expressed on the basis of per month of service, the salary of the agriculture teacher would probably be equal to, instead of greater than, that of the principal and academic teacher.

Men trained in agricultural education hold many responsible positions. Among those listed are: state supervisors and several district supervisors of agricultural education, heads of college departments, college professors, superintendents of Indian affairs, and superintendents of experiment stations of the United States Department of Agriculture. "A total of 39, or nine percent, have been awarded positions of responsibility and trust," concludes Pulley.

"THE past few weeks have brought all of us far closer to the war. Three of my former vocational agriculture boys were killed in the attack on Pearl Harbor on December 7. It makes one come to a fuller appreciation of what our country means to each of us and to the world. . . . Have been keeping in contact with our F.F.A. boys in the service and have been receiving some interesting letters." This is a portion of a letter written by a vocational agriculture instructor.

Local Banks Finance Barton Vocational Students Projects

LOCAL banks have co-operated in financing Barton vocational agricultural projects in a manner highly satisfactory to both borrower and the banks. These loans have ranged in amounts from $10 to $375 to an individual student.

The major handicap in developing livestock and certain crop projects for vocational students is the student's inability to finance these projects which require considerable cash expenditure, and the co-operation of local banks meets the pressing need and educates the boy in proper financing.

Livestock loans have been made for feeder calves, purebred dairy animals, purebred gilts and boars, brood mares, and young work stock. Feeder calf loans will include enough money above the cost of the calf to buy what supplementary feed is needed. These loans are payable when the calf is sold and seldom run longer than eight months. Loans for gilt pigs, which are relatively small, run for one year.

Loans for all breeding dairy and beef animals, workstock, and boars are made with the understanding that one-half of the note can be paid in one year and the remainder renewed for another year.

The loans on livestock other than hogs include enough for insurance against loss of the animals. This insurance is made payable to the local bank which requires no additional collateral other than mortgage on the animal and joint note signed by student and parent.

The insurance premium on these animals ranges from two dollars for animal valued at $25 to $3.25 for animals valued at $80, which is maximum beginning value.

These policies have an increasing value scale of 10% per month for the first five months. This feature gives the student protection against the loss of feed which usually runs high in feeding out beef cattle.—*Arkansas Vocational Visitor*

Book Review

The Soils That Support Us, Charles E. Kellogg, pp. 370, illustrated, published by The Macmillan Company, list price $3.50. An introduction to the study of soils and their use by men. Altho the reader may find a few new terms, technical terminology has been avoided in order to deal in a simple manner with the main principles of soils. How soils form, why and how they are so different from one another, how differently they respond to care, and what these differences mean to the plants that grow on them, and especially to the people who use them, both as individuals and as social groups, constitute the main topics set forth. The appendix includes Soil Classification and Soil Maps, Descriptive Outline of the Great Soil Groups, Where to Look, source publications, and a Glossary.

—APD

A man's judgment is no better than his information.

Future Farmers of America

A. W. TENNEY

Why I Want My Boy to Be a Future Farmer

RAYMOND M. CLARK, Assistant Supervisor, Michigan

R. M. Clark

I SHOULD like to present the parent's viewpoint concerning the values and benefits of the Future Farmer organization. I am fully aware that teachers of vocational agriculture use the F.F.A. organization as a means of training boys, and that boys look upon it as a social and recreational institution thru which they may participate in many worth-while activities. The F.F.A. allows the boys to identify themselves with a strong school organization thru which they may express themselves and learn to be leaders in worth-while projects. It provides opportunities for advancement thru degrees of membership based on accomplishment. It provides opportunity for trips to state and national conventions and contests.

As a parent, I should be glad to have my boy and his teacher recognize these values in the F.F.A. organization. However, I see other values, which I believe are fundamental to my son's development and which I believe the F.F.A. provides. I should like to present these values for consideration.

Social Development

The F.F.A. develops boys socially. By social development I do not mean only the development of social graces. Of course I want my boy to be able to attend social functions and conduct himself as a gentleman. I want him to be able to take a girl to a party without disgracing himself or the girl. The F.F.A. provides him opportunity for this kind of training thru its banquets, parties, and other activities.

Social development goes deeper than this, however, and these deeper things are those with which I am more vitally concerned. *The F.F.A. teaches boys to accept responsibilities as citizens.* In the F.F.A. organization boys learn to choose officers intelligently. If they are to have a worthwhile program they must choose officers who can carry out their program, just as we must choose officers for our community, our state, and our nation who can carry out the program we believe correct for our society. The members must study the qualifications of officers. They must decide what characteristics are necessary for a good president, a good treasurer, and a good secretary. They study the qualities which make good officers and make their choices accordingly. This ability is part of the social development I wish my boy to acquire.

A good citizen must also be able to cast his ballot for those candidates or for those proposals which he believes are for the best interests of society. In the F.F.A. my son will have opportunity to cast his ballot for candidates who have the qualities and who stand for the principles which he believes are correct. He will learn to cast his ballot, not on the basis of personal friendship or for selfish reasons, but rather for those candidates who he believes will stand for the principles and traditions of his organization. He will learn to appreciate the privilege of the ballot and to make use of his privilege in legitimate ways.

The F.F.A. will provide my boy opportunity for developing the ability to express himself in business meetings where questions are raised for debate. He will learn to analyze issues and to help the group arrive at decisions. Such a procedure is fundamental in a democracy and I want my son to be able to take his place with other citizens in this fundamental function of democratic society.

The F.F.A. teaches boys to be leaders and to accept and follow good leadership. The F.F.A. program of work will enable its members to develop leadership ability thru serving on committees, helping to plan the program while acting as an officer, member of a degree team, or in some other position of leadership. Many F.F.A. chapters provide opportunity for every member to serve on at least one committee each year.

Following good leadership is as essential as being a good leader. Most of us have opportunity to be leaders in one capacity and followers in another. We are all familiar with the expression about the little girl who would "take her dolls and go home" when the others would not play as she wished. We have to learn to work and play with others on many occasions. I want my boy to learn this lesson so that he may become a better member of society. He cannot learn to do this by dropping out whenever things do not go to suit him. As long as the principles are sound and right, I want him to develop the ability to stay in the game and help carry thru the program.

The F.F.A. teaches boys to work with others. Social development requires that folks work with others. A successful society requires that its members have the ability to work together. The F.F.A. provides opportunity for boys to learn to co-operate with one another. Many activities in the F.F.A. program of work provide such learning opportunities. Co-operative buying and selling, F.F.A. banquets, school fairs, and many other activities of a good F.F.A. program will assist in teaching boys to work together for the good of their organization.

The F.F.A. teaches boys their responsibility for community service. At the same time the boys are furthering the interests of their own organization; they learn not to be selfish with their program. They recognize their responsibilities for community service and carry out activities of this nature as part of their program. I know one F.F.A. organization that took over the discipline problem in the corridors of their school and "cleaned it up"; another chapter provided a recreation program for the rural boys and girls of their school during the noon hour.

The F.F.A. teaches boys the need for thrift. The F.F.A. chapter carries out a program of earnings and savings and wise spending. The money-raising activities of the F.F.A. will assist the boys in learning how to earn and save money.

The F.F.A. teaches boys the need for conserving health. I could not leave this part of the F.F.A. program without recognizing the fact that the F.F.A. also teaches boys responsibility to society in matters of health. I believe the F.F.A. helps its members recognize the need for preventing the spread of diseases, for conserving their own health, and for the safe operation of machinery and equipment. F.F.A. chapters develop this feeling of responsibility on the part of their members, and carry on a program of activities which will improve the health and safety factors in their community.

Cultural Development

Culture means the appreciation of work well done. The F.F.A. will help my boy to develop appreciation for good work. Work poorly done, work which is not one's best, robs society. A well-built building, a well-shocked field of wheat, or a well-prepared lesson in school helps to develop a pride and a culture which cannot be broken down. The F.F.A. stands for work well done.

Culture means appreciation for traditions. The F.F.A. will help develop an appreciation for the American way of life in its members. Democratic organization of government, appreciation of rural life, and a respect for craftsmanship on farms and in the factory are a part of our American tradition. I want the F.F.A. to help my boy to develop appreciations for these traditions by assisting him to become a skilled workman and by teaching him to be satisfied with nothing but the best work from his fellow members.

Culture means the appreciation of opportunities. Closely tied up with American tradition is the fact that men in America have opportunity to become established in a job or business. The F.F.A. helps boys realize that they have opportunities and that they owe it to society to make the best of these opportunities by establishing themselves as productive members of society. The F.F.A. dignifies work. F.F.A. members learn that it is honorable to work with their hands. I want my son to learn these facts.

Vocational Development

Vocational proficiency is necessary for good citizenship. The skilled workman who performs a desirable service for society is a good citizen. The person who does not do his best and who performs no service fails in his responsibility as a citizen. The

Chapter Projects Improve Livestock

J. R. STILLHAM, Teacher,
Clarendon, Texas

THE Clarendon F.F.A. Chapter has carried on numerous group and co-operative projects for the past five years, but none of them has been so effective or has had such far-reaching influence as the co-operative chapter projects with swine and Jersey cattle breeding males. These chapter projects were direct outcomes of the efforts of the chapter members to improve the quality of their livestock and that of the communities.

Swine Program

In May, 1937, three members of the local chapter purchased registered Poland China gilts to start a swine-production program for the local chapter. At that time there were five registered sows in Donley County. The chapter members realized that if improvement was to be made, outstanding males must be available for use by the chapter members and the community, so the chapter purchased a Poland boar of outstanding breeding and stationed him with one of the youths owning the registered Poland gilts. In the summer of 1937 a number of other chapter members purchased Duroc and Hampshire gilts, with the result that additional breeding facilities were badly needed. In the winter of 1937, the chapter members purchased Duroc and Hampshire males, leased a small plot of land south of the city, and built a herd boar lot which provided shelter and runways for the three boars owned by the chapter and a series of breeding pens for use during breeding season, to care for females belonging to chapter members and patrons. The boars were made available for public as well as chapter service and the boars were advertised thru adult classes, newspaper articles, and showings at all local swine shows. Two local swine shows are held each year by the local chapter. The boars were fed a proper ration and kept in good breeding condition at all times. Chapter members were assigned definite duties in connection with caring for the boars and six youths cared for them, each youth carrying the responsibilities for a two-month period. The chapter breeding program grew until an additional Hampshire male was added in 1939, and the Poland and Duroc boars were replaced in 1940. In 1941 the members had developed their swine-production program to the extent that the chapter purchased two outstanding young Chester White and Berkshire males, and the group now has five chapter-owned boars stationed at the chapter breeding pens for use by the members and patrons.

Results

The results of the program are quite evident in the fact that in both 1939 and 1940 the Clarendon Chapter won the Texas Swine Breeder's Association cash award for the most outstanding swine-production program among the chapters in the entire state, that paid up members of the Clarendon Chapter now own 85 registered sows of the six leading breeds, and that there are over 400 registered sows in the county. Financially the chapter has fared well with the project, realizing a net profit for the operation to this point of over $300.

The project provided outstanding leadership work for a large number of chapter members, with various committees responsible for the selection, purchase, and care of boars; other committees responsible for determining rations to be fed and securing feeds, and still others to handle the financial returns from the projects.

The scope of the local youths' swine program as a result of the project may be well realized by the fact that the members of the chapter fed out over 700 top market hogs the past year and fed over 500,000 pounds of home-grown kaffir and milo. The Clarendon Chapter's Swine Show, held semi-annually in the spring and fall of each year, is an outstanding event; thousands attend, and an average of 250 chapter-owned hogs are exhibited.

The semi-annual swine shows created an interest and desire on the part of the youths and their parents to exhibit their market barrows at other leading fairs and shows. For the past three years chapter members have exhibited their project barrows at the Tri-State Fair and the Amarillo Fat Stock Show, the Fort Worth Exposition and Fat Stock Show, and the State Fair of Texas, where they have won many honors. In 1941 local chapter members exhibited four of the five first-place winners in the club boys' swine show at Fort Worth, and five of the six breed champions, including the grand champion barrow at the State Fair of Texas. The boys have shown an average of 80 barrows at each of the shows, and during the past year have won over $2,000 in premium money on their top barrows, in addition to selling a large number of animals at top prices.

Dairy-Improvement Program

Encouraged by their success in their swine-breeding venture, members of the chapter in the fall of 1939 voted to undertake a dairy-improvement program in their county, which is a heavy producing grain and sweet sorghum area. Chapter members divided into three groups according to their community boundaries, and set about contacting their fathers and other adults in their communities. Each of the groups secured the pledge of a number of adults that if the F.F.A. Chapter would purchase a registered Jersey male and place him in their community, they would breed their females to the chapter male. Working on this basis, the chapter bought three registered Jersey males from high-producing, officially tested cows and placed them in the three communities, and in the spring of 1940 10 members of the chapter bought registered females from the Walnut Creek Farms at Azale, Texas.

The $450 expended for the bulls has been fully paid, and chapter members now own 33 registered Jersey females. A large number of the patrons have purchased registered heifers from the chapter members in addition to raising their own heifer calves from their grade cows and the registered males. So great was the interest that the local chapter sponsored Donley County's First Dairy Cattle Show in the spring of 1941 at which over 50 registered females were exhibited and classified.

F.F.A. projects in livestock in the Clarendon chapter mean quality livestock to the Donley County farmer and stockman, and with the passing of time, the co-operation and encouragement on the part of the adults in the work which the youths are doing in the community becomes greater.

F.F.A. assists boys in becoming good citizens by helping them develop vocational proficiency.

F.F.A. members study vocational agriculture in high school. As part of this program they get many experiences in actually performing and carrying out farming programs. The program involves productive enterprises which the boy owns and manages. He carries out the practices which he believes are correct. If he is successful he may improve the flocks or herds or crops on the farm, so that his dad can take him into partnership in the enterprise on the home farm until he is able to enter farming for himself.

Vocational proficiency is necessary for financial success. Financial success is often too much stressed. However, from a social standpoint, good citizens are able to support themselves so that they are not a burden to society. Vocational agriculture provides training opportunities for boys to assist them in developing proficiency in farming.

In conclusion, I want my son to be a Future Farmer member so that he may develop socially, culturally, and vocationally.

Developing an Evening-class Program

(Continued from page 211)

a densely populated area around the school and also to the fact that the village is the trade center for most of the farmers. In our other centers the average attendance is much smaller, but as in the above case, this is due to conditions around the centers.

Since the beginning of our One Variety Cotton Improvement Club in November, 1938, approximately 90 percent of the 5,000 acres of cotton land is being planted to first and second year seed of the adopted variety. Two hundred and sixty-nine bales have been ginned on gin days and seed saved for planting. In the spring of 1940, 24½ tons of this seed was sold at a premium price to planters outside our community. Classing and grading service has been used for two years and 614 bushels of planting seed were treated with Ceresan last spring.

Livestock Program

We have this year bought six registered Jersey bulls, one registered American jack, four registered Poland China gilts, one boar, and one Hereford bull for our community. These animals, with the best breeding records obtainable, were financed thru the Farm Security Administration and are used for community breeding service. The Jersey Bull Club has agreed to rotate its bulls every two years for six years to prevent inbreeding. Seven box and one trench silos have been built of approximately 40-ton capacity, and I am sure this method of storing feed will increase many times in the next few years.

Evening School Program

(Continued from page 213)

orrhagic septicemia and other common ailments were discussed.

Two meetings were used for "Dairy Sanitation in Respect to Producing a Good Product," and "Selection of Dairy Equipment." In the latter several pieces of equipment were examined and commented on for their various merits.

At the last meeting those farmers who had been in attendance at the required number of meetings were awarded diplomas for their effort. It was also decided that some time in the future it would be possible to establish "A Bull Ring." This would afford a method of proving the values of a sire. Another possibility was to set up a modified Cow Testing Association. Each man would weigh his own milk, collect his own samples, and bring them to the High School Agricultural Department for the students to make the test.

From general comments, the next topic to be discussed by this community in evening school class will be Co-operatives, their possibilities, kinds of co-operatives and how they work. This year's council of three men will hold over until the next series of meetings begin.

Farmers Test Milk for Butterfat

Farm Production for Victory

SECRETARY Wickard said at year's end: "More than 6 million farm families of the Nation are now engaged in a nationwide program to produce Food for Freedom. In general—the 1942 production goals call for more milk—and we need to convert more of that milk into cheese, evaporated milk, and dried skim milk; we need more eggs, and more pork; we hope beef cattle raisers will market more of their cattle in 1942; we need more canned vegetables; we need more oil from peanuts and soybeans. At the same time, we need to hold down on our production of three important crops—wheat, cotton, and tobacco.

"We have great stores of wheat and cotton and tobacco on hand; so we're not going to spend labor—which in some sections will be scarce—and farm machinery of which the supply will be limited—and fertilizer and spray materials in producing commodities that we don't need to win the war. That would be wasteful. We can't afford waste in these times. The same principles which guide the general agricultural planning need to guide our planning for home gardens. Home gardens on the farm enter into our agricultural goals for 1942. We hope for an increase of about a million and a third home vegetable gardens on the Nation's farms."

"A garden on every farm"—a total of 5,760,000 farm gardens—is part of the National Food-for-Freedom goals for 1942. Campaign is urging also the creation of community and school gardens, but cautioning against the conversion of city back yards, parks, playgrounds, or other land unsuited for the purpose into gardens.

"Defense gardens will be a vital part of the Food-for-Freedom program," Secretary Wickard said. "The defense garden program will release a larger amount of commercially grown vegetables for helping Britain and for improving the diets of people in our industrial centers."

Total volume of agricultural production in the United States has increased at the rate of about 1 percent a year since 1909. From 1909 to 1926 the rate of increase was 1.5 percent annually. This upward trend was followed by a relatively stable level of production to 1931, and by a sharp decline in output during the drought years. But from 1935 to 1941 agricultural production again increased sharply, and in 1941 the production of farm products was the largest on record. Large reserves have been accumulated in the Ever-Normal Granary.

Production of both crops and livestock has followed a similar trend from 1909 to date, altho production of crops has fluctuated much more from year to year than the production of livestock. Production of all crops increased from 81 percent of the 1935-39 average in 1909 to a record high of 117.4 in 1937, and totaled 109.4 percent in 1941. Production of all types of livestock and livestock products has tended upward since 1909—the index of production of all livestock increased from 78 percent of the 1935-39 average in 1909-10 to 115 in 1941.

—Agricultural Situation

Texas F.F.A. Increases Food and Feed Projects

J. B. RUTLAND, State Adviser, Texas Association of F.F.A.

TEXAS Future Farmers of America have planned a strong supervised farming program for 1941–42. Uppermost in all chapter activities are "food and feed for freedom" projects with special attention being given to plans for fall and winter gardens, egg and meat supply, canning crops, increased milk production, and emergency forage crops.

The major responsibility for the accomplishment of these objectives will rest with the teachers in the 858 local departments of vocational agriculture in Texas and with 1941–42 State Officers of the Texas Association of Future Farmers of America.

Many chapters have done outstanding work during the past year in the establishment of good farm practices, community improvements, co-operative endeavors, and other beneficial activities. Objectives have been accomplished in live-at-home projects, conservation of soil, water, trees and wildlife, rural recreation, leadership, home improvement, pest eradication and many other individual and co-operative projects. The F.F.A. boys have manifested a special interest in the National Defense Program for Out-of-School Rural Youth. At the 14th National F.F.A. Convention in Kansas City, October 19–23, the American Farmer Degree was conferred upon twenty-four Texas boys.

Editorial Comment

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country emphasis is placed upon the need for better programs of food production and conservation. Definite plans for the garden, orchard, poultry, and dairy cows must be made.

The fourth thing agricultural education should do is to help the farmer to carry out his plans. Families will not be provided with a well-balanced diet and armies will not be fed unless the plans are put into operation. The teacher must see that the home garden plan is carefully developed for every family in his patronage area, and that the plan is put into operation. There are certain plantings to be done in May, June, July, and practically every other month in the year. These must be done at the right time and in the right way. Good practices in cultivating, controlling diseases and insects, and harvesting must be followed if desired results are obtained.

It is important that food commodities produced be conserved. In many sections of the country, community canning plants, freezer lockers, and farm shops should be put on a 24-hour basis. The teacher who has his program developed to spend his summer months on the farm of his class members, in the community canning plants, community shops, and other places where farmers are working at their food, feed, and equipment problems will perform a patriotic service to our nation.

The challenge to agricultural education is to help farmers (1) to understand and appreciate the situation faced by our country, (2) to see the place of his farm and the specific contributions it may make to the situation, (3) to formulate intelligent plans of action that will assure maximum contribution and (4) to help the farmers carry out the plan. To accomplish these objectives will require all the energy and intelligence of every worker in this phase of educational endeavor.

Hill New Director in Illinois

Mr. J. E. Hill was recently appointed Director of Vocational Education in Illinois. He succeeds the late C. A. Bell, who was fatally injured in an automobile accident during the month of February. Mr. Hill was formerly a member of the faculty at the University of Illinois. He has been employed in the department of vocational agriculture in the State of Illinois since 1924. Illinois is fortunate in having secured a man for this position who is well-known thruout the state as an active leader in the field of vocational education.

There is thunder on the horizon as well as dawn.—Glenn Frank